

REMARKS

Claims 1, 3, 5, 6, 8 and 10 are pending in this application. By this Amendment, claims 1, 3, 5, 6, 8 and 10 are amended. No new matter is added as the claim amendments merely clarify the features recited in the pending claims. A Request for Continued Examination is attached. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, on page 2, rejects claims 1, 5, 6 and 10 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2003/0027024 to Iio et al. (hereinafter "Iio") in view of U.S. Patent No. 6,632,552 B2 to Yamanashi. The Office Action, on page 5, rejects claims 3 and 8 under 35 U.S.C. §103(a) as allegedly being unpatentable over Iio in view of Yamanashi and further in view of U.S. Patent No. 6,638,652 to Motozono. These rejections are respectfully traversed.

Claim 1 recites, among other features, a control apparatus comprising: a cathode-side gas pressure detecting unit configured to detect a cathode-side gas pressure within at least one of the oxidizing gas supply line and the cathode; a target hydrogen partial pressure determining unit configured to dynamically calculate a target hydrogen partial pressure regarding a hydrogen pressure among a gas mixture in the anode, the dynamic calculation being executed based on a required electricity generation amount; a hydrogen supply pressure setting unit configured to set a hydrogen supply pressure of hydrogen to be supplied to the fuel cell to a value that is calculated based on a value that is obtained by adding the calculated target hydrogen partial pressure to the detected cathode-side gas pressure; and a hydrogen supply control unit configured to regulate the supply of hydrogen from the hydrogen supplying unit to the fuel cell at the set hydrogen supply pressure, wherein, upon activation of the fuel cell, the cathode-side gas pressure is set to atmospheric pressure. Claim 6 recites similar features.

Iio teaches a fuel cell power plant. In response to Applicant's previous arguments over Iio reference, the Office Action addresses those arguments at pages 6-9. Applicant does not believe that the Office Action completely addresses the detailed arguments set forth in Applicant's previous response. Further, Applicant does not concede that any of the conclusions of the Office Action are reasonable. Rather, and in an effort to advance prosecution of this application, Applicant amends the pending claims, as discussed above, to clarify the subject matter recited in those claims in a manner that clearly distinguishes that subject matter over the Office Action's continued application of Iio to the subject matter of the pending claims. In the fuel cell power plant disclosed in Iio, the hydrogen supply amount is controlled by hydrogen sensor 40. At least at paragraph [0040], Iio describes a process in which "[t]he hydrogen sensor 40 detects the hydrogen concentration in the gas in the anode effluent recirculation passage 8." In this regard, any hydrogen detected value in Iio is not detected until the hydrogen is passed by the hydrogen sensor 40. Based on this, hydrogen cannot be supplied appropriately for some predetermined period in the fuel cell power plant of Iio.

Conversely, the subject matter of the pending claims is directed to a control apparatus, and control method, in which hydrogen can be appropriately supplied with consideration of the impurities while setting a cathode-side gas pressure to atmospheric pressure at a point of activating the fuel cell. Applicant's disclosure, at least at paragraph [0043], as originally filed describes that "the ECU 3 sets the air electrode pressure during activation to the atmospheric pressure." The ECU 3 then calculates the hydrogen target pressure from the gas pressure on the air electrode side in the manner now explicitly recited in the pending claims. *See also*, Fig. 3, and the accompanying description at paragraphs [0050] - [0051], of Applicant's disclosure. At least this feature now clarified, and positively recited, in the pending claims is not taught, nor would it otherwise been rendered obvious, by the Iio reference.

For at least the foregoing reasons, Iio cannot reasonably be considered to teach, or otherwise to have rendered obvious, the combinations of all of the features positively recited in independent claims 1 and 6. Further, and because none of the other applied references overcomes the above-identified shortfall in the application of Iio to the subject matter of independent claims 1 and 6, claims 3, 5, 8 and 10 also would not have been rendered obvious by any combination of the currently-applied references for at least the respective dependence of these claims on allowable base claims, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 1, 3, 5, 6, 8 and 10 under 35 U.S.C. §103(a) as allegedly being unpatentable over the asserted combinations of applied references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 5, 6, 8 and 10 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Attachments:

Petition for Extension of Time
Request for Continued Examination

JAO:JTL/emd

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